

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 – 4. (Canceled)

5. (Currently amended) A method for integrating applications hosted at different enterprises separated by at least one firewall, the method comprising steps of:

receiving high level business data from a source application program at an agent device acting operating as a spoke in a first hub and spoke integration system, wherein the agent device comprises an encryption engine [[a]] ~~from a source application program;~~

using the agent device for encoding the high level business data according to a message queuing protocol to provide an MQ message to an MQ server operating as a hub in a second hub and spoke integration system separated from the first hub and spoke integration system by the Internet;

using a first queue manager for encrypting the MQ message using Hyper-Text Transport Protocol Secure (HTTPS) to provide an encrypted MQ message;

using the first queue manager for storing the encrypted MQ message for delivery to the MQ server until said MQ server is ready; and

transmitting, via the Internet using HTTP[[,]] and MQ Series Internet Passthrough (MQ IPT), and through the firewalls at each end of the Internet, the encrypted MQ message to a the MQ server, acting as a hub in another hub and spoke integration system;

using a second queue manager at the second hub and spoke integration system for decrypting the encrypted MQ message to produce a decrypted MQ message;

using a second agent device for decoding the decrypted MQ message to recover the high level business data;

wherein the high level business data passes through a first demilitarized zone in the first

hub and spoke integration system and a second demilitarized zone in the second hub and spoke integration system in order to reach the MQ server;

wherein the first and second demilitarized zones each comprise at least one firewall separating its resident queue manager from the Internet;

using the MQ server for ~~running a destination application program~~ for processing of the high level business data when received.

6 -7. (Canceled)

8. (Original) The method of claim 5 further comprising maintaining a record of the messages received from the source application program.

9. (Original) The method of claim 8 wherein the record of the messages received from the source application program comprises information on the number of messages received.

10. (Previously presented) The method of claim 8 wherein the record of the messages received from the source application program comprises information on type of messages received.

11-17 (canceled)

18. (Currently amended) A method for transmitting high-level data in real time to one or more enterprises, the method comprising:

receiving via the Internet and through firewalls, at ~~an~~ a first agent acting as a spoke in a first hub and spoke integration system, from an application, ~~[[a]]~~ an encrypted MQ message comprising high level business data from a source application and a request to process the data by a server acting as a hub in ~~another~~ a second hub and spoke integration system, ~~running;~~

converting decoding the encrypted MQ message into an MQ message using a message queuing protocol located at an the first agent used as a spoke;

using a first queue manager for ~~encrypting~~ decrypting the MQ message using a Hyper-Text Transport Protocol Secure (HTTPS) security protocol to ~~provide a secure MQ message;~~

storing the decrypted MQ message;

and

transmitting, via the Internet using HTTP, and MQSeries Internet Passthrough(MQ IPT), and through the firewalls at each end of the Internet, the encrypted MQ message to a first queue manager for retransmission at a time when the network is suitable for transporting the message to the server.

19. (Previously presented) The method of claim 18, wherein the high-level data comprises customer information.

20-22. (Canceled)

23. (Currently amended) A system for integrating applications in different enterprises separated by at least one firewall, the system comprising:

a first demilitarized zone comprising at least one firewall separating a first local area network from the Internet;

a second demilitarized zone comprising at least one firewall separating a second local area network from the Internet;

wherein each local area network comprises:

a memory device comprising ~~an~~ a software agent ~~used as a spoke in a hub and spoke integration system, the agent~~ configured for receiving high level business data from a source application;

the memory device also comprising an encryption engine using Hyper-Text Transport Protocol Secure (HTTPS) for encrypting the high level business data to produce encrypted business data;

a queue manager for receiving the encrypted high level business data and for storing the high level business data for delivery to a target server with instructions to transmit the data when the target server is ready to process the data; and

an ~~output~~ I/O interface for transmitting, via the Internet using HTTP, and MQSeries Internet Passthrough (MQ IPT), the encrypted high level business data to the target server acting as a hub in another hub and spoke integration system; and running the target application, wherein the system high level business data and the target server are separated by the first and second demilitarized zones ~~at least one firewall~~.

24. (Currently amended) The system of claim 23, further comprising a protocol for telling a sender to stop sending messages so that it can perform ~~the~~ bookkeeping functions.

25. (Previously presented) The system of claim 23, wherein the encryption engine comprises a secure sockets layer protocol.

26. (Currently amended) A computer readable storage medium comprising code that, when executed, causes a computer to:

receiving at an agent acting as a spoke in a first hub and spoke integration system, high level business data ~~[[a]]~~ from a source application program;

encoding the data according to a message queuing protocol to provide an MQ message;

encrypting the MQ message using Hyper-Text Transport Protocol Secure (HTTPS) to provide an encrypted MQ message; and

transmitting, via the Internet using HTTP, and MQSeries Internet Passthrough, and through the firewalls at each end of the Internet, the encrypted MQ message to a server, acting as a hub in ~~another~~ a second hub and spoke integration system; and running a destination application program for processing of the high level business data;

wherein the high level business data passes through a first demilitarized zone in the first hub and spoke integration system and a second demilitarized zone in the second hub and spoke

integration system in order to reach the server;

wherein the first and second demilitarized zones each comprise at least one firewall separating its server from the Internet.

27. (Previously presented) The computer readable storage medium of claim 26 further comprising an instruction for storing the encrypted MQ message in a queue manager prior to transmitting the encrypted MQ message.

28. (Previously presented) The computer readable storage medium of claim 26 further comprising an instruction for sending a message to the source application program instructing the source application program to stop sending data.

29. (Previously presented) The computer readable storage medium of claim 26 further comprising an instruction for maintaining a record of the messages received from the source application program.

30. (Currently amended) The computer readable storage medium of claim ~~30~~ 26 wherein the record of the messages received from the source application program comprises information on the number of messages received.